

PATENT COOPERATION TREATY
PCT
INTERNATIONAL SEARCH REPORT
(PCT Article 18 and Rules 43 and 44)

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| Applicant's or agent's file reference CCAMM-01 | FOR FURTHER ACTION | see Form PCT/ISA/220 as well as, where applicable, item 5 below. |
| International application No. PCT/AU2005/001020 | International filing date (day/month/year) 13 July 2005 | (Earliest) Priority Date (day/month/year) 14 July 2004 |
| Applicant GRIFFITHS & BEERENS PTY. LTD. et al | | |

This international search report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This international search report consists of a total of 5 sheets.

It is also accompanied by a copy of each prior art document cited in this report.

1. Basis of the report

a. With regard to the language, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

The international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).

b. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, see Box No. I.

2. Certain claims were found unsearchable (See Box No. II).

3. Unity of invention is lacking (See Box No. III).

4. With regard to the title,

the text is approved as submitted by the applicant.

the text has been established by this Authority to read as follows:

CENTRIFUGAL DRUM CLUTCH ASSEMBLY AND METHOD OF MANUFACTURE

5. With regard to the abstract,

the text is approved as submitted by the applicant.

the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box No. IV. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. With regard to the drawings,

a. the figure of the drawings to be published with the abstract is Figure No. 1

as suggested by the applicant.

as selected by this Authority, because the applicant failed to suggest a figure.

as selected by this Authority, because this figure better characterizes the invention.

b. none of the figures is to be published with the abstract.

Box No. IV Text of the Abstract (Continuation of item 5 of the first sheet)

A clutch drum assembly comprising a clutch drum (21) and a drive means. The clutch drum (21) has an axis of rotation and includes an end wall (22). The drive means, specifically a drive spline (1) or a fixed drive sprocket axially to one end of the drive means, is a flange (5) with one or more radial evenly spaced minimally sized apertures (6) that have been counter-sunk or counter bored to one side. Unitary axial motion of the two components is achieved via mechanical connection between the two said components by tightly pressing metal from the outer surface of the end wall (22) clutch through each of the minimally sized apertures (6) in the drive means flange (5) against a die positioned proximate to each said aperture (6) forging the metal into the counter sunk or counter bored portion of the drive means flange (5).

INTERNATIONAL SEARCH REPORT

International application No.

PCT/AU2005/001020

A. CLASSIFICATION OF SUBJECT MATTER

Int. Cl.?: F16D 1/06, 1/072, 13/62, 43/06, 65/10

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

DWPI: IPC: F16D/- & keywords: drum, shaft, drive, flange, spline, aperture, opening, hole, recess

C. DOCUMENTS CONSIDERED TO BE RELEVANT

| Category* | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No. |
|-----------|--|--------------------------|
| A | US 4984669 A (HOFFMAN) 15 January 1991 Whole document | |
| A | DE 3135203 A1 (SACHS-DOLMAR GmbH & CO) 17 March 1983 Whole document | |
| A | DE 29616652 U1 (DOLMAR GmbH) 6 February 1997 Whole document | |
| A | JP 11301202 A (NISSAN DIESEL KOGYO KK) 2 November 1999 Whole document | |

 Further documents are listed in the continuation of Box C See patent family annex

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|---|-----|--|
| * Special categories of cited documents: | | |
| "A" document defining the general state of the art which is not considered to be of particular relevance | "T" | later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention |
| "E" earlier application or patent but published on or after the international filing date | "X" | document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone |
| "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) | "Y" | document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art |
| "O" document referring to an oral disclosure, use, exhibition or other means | "&" | document member of the same patent family |
| "P" document published prior to the international filing date but later than the priority date claimed | | |

Date of the actual completion of the international search
22 August 2005Date of mailing of the international search report
25 AUG 2005Name and mailing address of the ISA/AU
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INTERNATIONAL SEARCH REPORT

International application No.

PCT/AU2005/001020**C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT**

| Category* | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No. |
|-----------|--|-----------------------|
| A | US 3144782 A (EDMUNSON) 18 August 1964 Whole document | |
| A | WO1991/001859 A1 (BEERENS) 21 February 1991 Whole document | |
| A | US 3610385 A (DOLATA) 5 October 1971 Whole document | |

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No.

PCT/AU2005/001020

This Annex lists the known "A" publication level patent family members relating to the patent documents cited in the above-mentioned international search report. The Australian Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

| Patent Document Cited in Search Report | | Patent Family Member |
|---|----------|----------------------|
| US | 4984669 | NONE |
| DE | 3135203 | NONE |
| DE | 29616652 | NONE |
| JP | 11301202 | NONE |
| US | 3144782 | NONE |
| WO | 9101859 | NONE |
| US | 3610385 | NONE |

Due to data integration issues this family listing may not include 10 digit Australian applications filed since May 2001.

END OF ANNEX